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10/790,726	03/03/2004	Lassi Hippelainen	60282.00155	2631	
32294 7590 O931/2008 SQUIRE, SANDERS & DEMPSEY L.L.P. 8000 TOWERS CRESCENT 14TH FLOOR TYSONS CORNER, VA 22182-2700			EXAM	EXAMINER	
			JEAN GILLES, JUDE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/790,726 HIPPELAINEN, LASSI Office Action Summary Art Unit Examiner JUDE J. JEAN GILLES 2143 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 28 December 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-22 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) ☐ Claim(s) 1.2 and 4-22 is/are rejected. 7) Claim(s) 3 is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.

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DETAILED ACTION

This office action is responsive to communication filed on 12/20/2007. Claimed priority is granted from foreign application No: 03028897.1 with a priority date of 12/16/2003.

Information Disclosure Statement

 The references listed on the Information Disclosure Statement submitted on 08/25/2005 have been considered by the Examiner (see attached PTO-1449A).

Response to Amendment/Arguments

 In the claims, 1-22 remain pending in the application with claims 1-19 being amended, and no claim has been cancelled herein. Claims 1-22 represent a method and apparatus for an "IP ADDRESS MANAGEMENT."

Applicant's arguments with respect to claims 1-22 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the existing ground of rejection as explained here below. Applicants' amendments to the independent claims are not properly made and as to perhaps place them in condition for allowance.

The dependent claims stand rejected as articulated in the First Office Action and all objections not addressed in Applicant's response are herein reiterated.

In response to Applicant's arguments, 37 CFR § 1.11(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in

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view of the state of the art disclosed by the references cited or the objections made. He or she must show the amendments avoid such references or objections."

Applicant's Request for Reconsideration filed on 12/20/2007has been carefully considered but is not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention:

Point A: Applicants content that the teachings of Baum and Donaldson do not disclose "at least one queue configured to hold released addresses", as recited in claims 1, 13-14, 17 and similarly in claims 20 and 22. (Emphasis added) Referring to Baum, the pool of available addresses 1009 of Baum is quite different from a queue that is holding released addresses. The pool 1009 provides unused and available addresses, while the released addresses are addresses which were previously assigned to IP network devices and have subsequently been released.

As to point A, It is the position of the Examiner that Baum in combination with Donaldson in detail teaches the limitations of the above mentioned claims. The Examiner disagrees with applicant's argument. In par. 0023, Baum teaches a pool or queue of released addresses that become available, which is not different from the teaching of the invention contrary to the assertion of the Applicant.

Point B: Applicants contend that as for Donaldson, even if the IP filtering list is regarded as queue, which it is not, Donaldson fails to teach that an address which is held in the IP filtering list is returned to "the end of the at least one queue", as recited in

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claim 1, 13-14 and 17 and similarly in claims 20 and 22. The IP filtering list contains IP addresses of detected providers of junk email. Donaldson does not disclose any purpose for using a queue to hold the addresses and certainly does not state any purpose for placing the detected IP addresses at the end of the a queue, as required by the subject matter recited in claims 1, 13-14 and 17, and similarly in claims 20 and 22.

As to point B, see rejection of claim 1 below.

Examiner notes that applicant has failed in presenting claims and drawings that delineate the contours of this invention as compared to the cited prior art. Applicant has failed to clearly point out patentable novelty in view of the state of the art disclosed by the references cited that would overcome the 103(a) rejections applied against the claims, the rejection is therefore sustained.

Allowable Subject Matter

 Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

4. Claims 1-13 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had

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possession of the claimed invention. Claims 1-13 are amended to comprise apparatus with elements such as detector, returner, adder, classifier, transmitter, receiver with are no where to be found in the specifications. The claims are rejected as previously presented and the grounds for the First Office Action rejections are sustained.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1, 2, and 4-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baum, U.S. Publication No. 2004/0071164 A1 in view of Donaldson, U.S. Patent No. 6,321,267 B1.

Regarding claim 1, Baum teaches the invention substantially as claimed. Baum discloses an Apparatus (fig. 10; the DHCP server is the network Apparatus) comprising: at least one queue configured to hold released addresses (fig. 10, items 1009-1014; par. 0100, and 0022, 0023; note the pool of available; unused IP addresses 1009, represents one queue that can be used for holding released or available addresses);

detect that a packet has been addressed to a released address held in the at least one queue (par. 0101, and 0102; the IP address assignment request implies that the request in itself is made of packets that are addressed to the released queue 1009).

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Although it is understood that Baum teaches that the DHCP server 520 device removes the leased address from the pool, and add a new entry in the address lease information, Baum does not disclose specifically the step " return the held address to which the packet (request for IP address assignment) has been addressed to an end of the at least one queue".

In an analogous art, Donaldson shows a plurality of device addresses that are contained within a list (queue) and that IP an IP address detected by a sensor is appended back to an IP filtering list called a blacklist (see Donaldson, column 8, lines 61-64; column 18, lines 24-26; and column 24, lines 39-41). These techniques provide a performance improvement by quickly rejecting subsequent connections from IP addresses that have already been rejected (or released from a host) by one of the filtering tests and return to the back of the queue (see Donaldson; column 8, lines 64-67).

Given this feature, a person of ordinary skill in the art would have readily recognized the desirability and advantages of modifying the system of detecting a released IP address of Baum to employ the features of appending an IP address to the back of a queue shown by Donaldson. This combination would facilitate increased security in a network thereby blocking relayed spam that involves databases of blacklisted IP addresses that can similarly be used to block packets (see Donaldson; column 6, lines 14-21), thereby reaching a leased IP address to detect fraudulent attempts to obtain an IP address in a network while providing security, screening and

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location verification services as stated by Baum in par. 0043. By this rationale, claim 1

is rejected.

Regarding claims 2, and 4-19 the combination Baum-Donaldson discloses:

2. The network device according to claim 1, further configured to:

detect that an address of a user has been released (see Baum; par. 0022, 0023);

and

add the released address to the end of the at least one gueue (see Donaldson.

column 8, lines 61-64; column 18, lines 24-26; and column 24, lines 39-41; note that

the released address of Baum employs the technique of appending the IP address

of Donaldson).

4. The network device according to claim 1, further configured to: upon detection

that a packet has been addressed to the released address held in the at least one

queue (see Baum; par. 0101, and 0102), send an error notification to a source of the

packet (see Donaldson; column 29, lines 56-62; note that the error message that is

send to the remote host represents the error message notification and that the

remote host is the source of the packet). The same motivation and reason to

combine utilized in the rejection of claim 1 is also valid for this claim. By this

rationale, claim 4 is rejected.

5. The network device according to claim 1, wherein the network device is

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configured to detect that a packet has been addressed to the released address held in the at least one queue by receiving the packet addressed to the released address (see Baum; par. 0101, and 0102; it is important to realize that the IP assignment request conveyed to the DHCP server contains the data packet addressed to the released address held).

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- 6. The network device according to claim 2, wherein the network device is configured to detect that an address of a user has been released by detecting a loss of a connection which releases its address (see Baum; par. 0023; the loss of connection is assume to be the failure to receive a response from the user, and that the IP address assigned to the non-responding device is added back to the pool (queue) of available IP addresses).
- 7. The network device according to claim 1, wherein the network device is configured to detect that a packet has been addressed to the released address held in the at least one queue (see Baum; par. 0101, and 0102) by receiving an error notification indicating an unused address (see Donaldson; column 29, lines 56-62; note that the error message technique of Donaldson can be used for a variety of notification message types. In the context of combining Baum with Donaldson, it would have been obvious for an ordinary skill in the art to indicate an unused address utilized in Baum's system using the error notification mechanism of

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Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 7 is rejected.

- 8. The network device according to claim 2, wherein the network device is configured to detect that an address of a user has been released (see Baum; par. 0022, 0023); by receiving a notification thereon (see Donaldson; column 29, lines 56-62; note that the error message technique of Donaldson can be used for a variety of notification message types. In the context of combining Baum with Donaldson, it would have been obvious for an ordinary skill in the art to receive the notification utilized in Baum's system using the error notification mechanism of Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 8 is rejected.
- 9. A network device for forwarding IP data packets (see Baum, fig. 10), the network device configured to:

receive a packet addressed to an unused address (see Baum; par. 0101, and 0102; note that the IP address assignment request implies that the request in itself is made of packets that are addressed to and received by the released queue 1009 of the DHCP server 520); and

send an error notification to a network node for managing addresses, the error notification indicating the unused address (see Donaldson; column 29, lines 56-62;

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note that the error message technique of Donaldson can be used for a variety of notification message types. In the context of combining Baum with Donaldson, it would have been obvious for an ordinary skill in the art to indicate the unused address utilized in Baum's system using the error notification mechanism of Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 9 is rejected.

- 10. The network device according to claim 9, wherein the error notification (see Donaldson; column 29, lines 56-62) causes a return of a released address held in a queue and corresponding to the unused address to an end of the queue, the queue holding released addresses (see Baum; par. 0101, and 0102; also see Donaldson, column 8, lines 61-64; column 18, lines 24-26; and column 24, lines 39-41; Donaldson teaches an error notification technique and a mechanism for appending a released address to an end of a queue. I would have been obvious for an ordinary skill in the art, at the time the invention was made to use the error notification of Donaldson to trigger the return of the released address of an unused device in the system of Baum and append that address held in the back of the queue). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 10 is rejected.
- 11. The network device according to claim 9, further configured to:

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detect a loss of a connection which releases its address (see Baum; par. 0023; the loss of connection is assume to be the failure to receive a response from the user, and that the IP address assigned to the non-responding device is added back to the pool (queue) of available IP addresses); and

send a notification about the released address to the network node for managing addresses (see Donaldson; column 29, lines 56-62; note that the error message that is send to the remote host represents the error message notification to the DHTP server node managing the addresses). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 11 is rejected.

12. The network device according to claim 9, further configured to:

upon receipt of the packet addressed to the unused address (see Baum; par. 0101, and 0102; note that the IP address assignment request implies that the request in itself is made of packets that are addressed to and received by the released queue 1009 of the DHCP server 520), send an error notification to a source of the packet (see Donaldson; column 29, lines 56-62; note that the error message that is send to the remote host represents the error message notification and that the remote host is the source of the packet). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 12 is rejected.

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13. A system for managing addresses to be assigned to users of an IP network (see Baum, fig. 10), comprising:

a first network node for managing addresses (*DHCP server 520*), the first network node comprising:

at least one queue for holding released addresses (fig. 10, items 1009-1014; par. 0100, and 0022, 0023; note that the pool of available, unused IP addresses 1009, represents one queue that can be used for holding released or available addresses); the first network node configured to:

detect that a packet has been addressed to a released address held in the at least one queue (par. 0101, and 0102; note that the IP address assignment request implies that the request in itself is made of packets that are addressed to the released queue 1009); and

return the held address to which the packet has been addressed to an end of the at least one queue (see Donaldson, column 8, lines 61-64; column 18, lines 24-26; and column 24, lines 39-41; note that the released address of Baum uses the technique of appending the IP address of Donaldson); and

a second network node for forwarding IP data packets (the edge router 600 of fig. 6 represents the second node), the second network node configured to:

receive a packet addressed to an unused address (see Baum, par. 101; the edge router responds as it receives the IP address assignment request; Baum teaches that this is done "as is known in the art using DHCP protocol"; the unused address

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that the request (packets) is addressed to resides in the DHCP server node disclosed above); and

send an error notification to the first network node, the error notification indicating the unused address (see Donaldson; column 29, lines 56-62; note that the error message technique of Donaldson can be used for a variety of notification message types. In the context of combining Baum with Donaldson, it would have been obvious for an ordinary skill in the art to indicate an unused address utilized in Baum's system using the error notification mechanism of Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 13 is rejected.

14. A method comprising:

detecting that a packet has been addressed to a released address held in a queue holding released addresses (see Baum; par. 0101, and 0102; note that the IP address assignment request implies that the request in itself is made of packets that are addressed to the released queue 1009); and

returning the held address, to which the packet has been addressed, to an end of the queue (see Donaldson, column 8, lines 61-64; column 18, lines 24-26; and column 24, lines 39-41; note that the released address of Baum uses the technique of appending the IP address of Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 14 is rejected.

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15. A method:

receiving a packet addressed to an unused address(see Baum; par. 0101, and 0102; note that the IP address assignment request implies that the request in itself is made of packets that are addressed to and received by the released queue 1009 of the DHCP server 520); and

sending an error notification to a network node configured to manage addresses, the error notification indicating the unused address (see Donaldson; column 29, lines 56-62; note that the error message technique of Donaldson can be used for a variety of notification message types. In the context of combining Baum with Donaldson, it would have been obvious for an ordinary skill in the art to indicate an unused address utilized in Baum's system using the error notification mechanism of Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 15 is rejected.

16. The method according to claim 15, wherein sending the error notification (see Donaldson; column 29, lines 56-62) further comprises causing a return of a released address held in a queue and corresponding to the unused address to an end of the queue, the queue holding released addresses (see Baum; par. 0101, and 0102; also see Donaldson, column 8, lines 61-64; column 18, lines 24-26; and column 24, lines 39-41; Donaldson teaches an error notification technique and a mechanism for appending a released address to an end of a queue. I would have been obvious for

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an ordinary skill in the art, at the time the invention was made to use the error notification of Donaldson to trigger the return of the released address of an unused device in the system of Baum and append that address held in the back of the queue). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 16 is rejected.

17. A computer-readable program distribution medium encoding a computer program of instructions being configured to control a processor to perform: detecting that a packet has been addressed to a released address held in a queue holding released addresses (see Baum; par. 0101, and 0102; note that the IP address assignment request implies that the request in itself is made of packets that are addressed to the released queue 1009); and

returning the held address, to which the packet has been addressed, to an end of the queue (see Donaldson, column 8, lines 61-64; column 18, lines 24-26; and column 24, lines 39-41; note that the released address of Baum uses the technique of appending the IP address of Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 17 is rejected.

18. The computer program according to claim 17, further comprising a computer-readable medium on which the computer program of instructions are stored (see Baum: fig. 10, within DHCP server 520, memory 1006 is used to store software code

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for storing IP addresses, information and software code for performing the steps of the invention).

19. The computer program according to claim 17, wherein the computer-readable distribution medium is configured to be directly loadable into an internal memory of the computer (see Baum; fig. 10, within DHCP server 520, memory 1006).

20. (New) An apparatus, comprising:

holding means for holding released addresses (see Baum; fig. 10, items 1009-1014; par. 0100, and 0022, 0023; note the pool of available; unused IP addresses 1009, represents one queue that can be used for holding released or available addresses); detecting means for detecting that a packet has been addressed to a released address held in the at least one holding means (see Baum; par. 0101, and 0102; the IP address assignment request implies that the request in itself is made of packets that are addressed to the released queue 1009). and

returning means for returning the held address to which the packet has been addressed to an end of the at least one holding mean (see Donaldson, column 8, lines 61-64; column 18, lines 24-26; and column 24, lines 39-41).

21. (New) An apparatus, comprising:

receiving means for receiving a packet addressed to an unused address (see Baum; par. 0101, and 0102; note that the IP address assignment request implies that the

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request in itself is made of packets that are addressed to and received by the released queue 1009 of the DHCP server 520); and

sending means for sending an error notification to a network node configured to manage addresses, the error notification indicating the unused address (see Donaldson; column 29, lines 56-62; note that the error message technique of Donaldson can be used for a variety of notification message types. In the context of combining Baum with Donaldson, it would have been obvious for an ordinary skill in the art to indicate the unused address utilized in Baum's system using the error notification mechanism of Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 21 is rejected.

22. (New) A system, comprising:

managing means for managing addresses (see Baum; DHCP server 520); holding means for holding released addresses (see Baum; fig. 10, items 1009-1014; par. 0100, and 0022, 0023; note the pool of available; unused IP addresses 1009, represents one queue that can be used for holding released or available addresses);

detecting means for detecting that a packet has been addressed to a released address held in the holding means (see Baum; par. 0101, and 0102; note that the IP address assignment request implies that the request in itself is made of packets that are addressed to the released queue 1009);

returning means for returning the held address to which the packet has been addressed to an end of the at least one holding means (see Donaldson, column 8, lines

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61-64; column 18, lines 24-26; and column 24, lines 39-41; note that the released address of Baum uses the technique of appending the IP address of Donaldson):

receiving means for receiving a packet addressed to an unused address (see Baum; par. 0101, and 0102; note that the IP address assignment request implies that the request in itself is made of packets that are addressed to and received by the released queue 1009 of the DHCP server 520); and

sending means for sending an error notification to the managing means, the error notification indicating the unused address (see Donaldson; column 29, lines 56-62; note that the error message technique of Donaldson can be used for a variety of notification message types. In the context of combining Baum with Donaldson, it would have been obvious for an ordinary skill in the art to indicate the unused address utilized in Baum's system using the error notification mechanism of Donaldson). The same motivation and reason to combine utilized in the rejection of claim 1 is also valid for this claim. By this rationale, claim 22 is rejected.

Conclusion

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded
of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from examiner

should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914.

The examiner can normally be reached on Monday-Thursday and every other Friday

from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number

for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (571) 272-

.0080

Jude Jean-Gilles

Patent Examiner

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March 27, 2008

/Nathan J. Flynn/

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Supervisory Patent Examiner, Art Unit 2154